

**CLAIMS**

1. A method of programming an image acquisition system comprising image reception or detection means, such as a camera, having a field of vision and means of processing the images taken by said camera, in order to define at least one detection area in the field of vision of the camera, characterized in that it consists:
  - in placing a sending device (21) in at least one position in the field of vision of the camera and in activating the sending device so that it sends at least one electromagnetic initialization signal or radiation, such as a light signal, having predetermined characteristics, towards the camera when it is in said at least one position,
  - in analyzing the content of the images (9a) obtained from the camera so as to recognize said initialization signal,
  - in locating said signal by its coordinates in the images obtained from the camera,
  - and in defining, according to a predetermined program, at least one detection area (15) in the field of vision of the camera based on said coordinates of said initialization signal.
2. The programming method as claimed in claim 1, characterized in that it consists in placing a sending device (21) in turn in at least two positions in the field of vision of the camera and in activating in turn the sending device so that it sends initialization signals having predetermined light characteristics towards the camera when it is in said positions,
  - in analyzing the content of the images (9a) obtained from the camera so as to recognize said initialization signals,
  - in locating these signals by their coordinates in the images obtained from the camera,

and in defining, according to a predetermined program, at least one detection area (15) in the field of vision of the camera based on said coordinates of said initialization signals.

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3. The programming method as claimed in one of claims 1 and 2, characterized in that it consists in prestoring initialization data corresponding to said at least one initialization signal, in  
10 comparing the measured data corresponding to at least one point of the images received with this prestored initialization data and in determining or computing the coordinates of at least one initialization point in the images received when  
15 the measured data corresponding to this point is equal or roughly equal to the stored initialization data.

4. The programming method as claimed in any one of  
20 the preceding claims, characterized in that it consists in defining at least one detection area in the field of vision of the camera based on the coordinates of at least one received initialization signal, the extent and position of  
25 which relative to these coordinates are predefined.

5. The programming method as claimed in any one of  
30 the preceding claims, characterized in that it consists in defining a detection area in the field of vision of the camera based on the coordinates of two received initialization signals, located at least on one side of the line passing through the points corresponding to these coordinates.

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6. The programming method as claimed in any one of the preceding claims, characterized in that it consists in defining a polygonal detection area in the field of vision of the camera based on the

coordinates of at least three received initialization signals, the sides of which pass through the points corresponding to these coordinates.

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7. The programming method as claimed in any one of the preceding claims, characterized in that said initialization signals have different predetermined light characteristics.

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8. The programming method as claimed in any one of the preceding claims, characterized in that it consists in analyzing the content of the images received by digital filtering or thresholding.

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9. The programming method as claimed in any one of the preceding claims, characterized in that each initialization signal is a light signal sent according to a predetermined modulating frequency and/or a predetermined chroma.

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10. A device for programming an image acquisition system comprising image reception or detection means, such as a camera, having a field of vision and means of processing the images taken by said camera, characterized in that it comprises at least one mobile sending device (21) suitable for sending at least one electromagnetic initialization signal or radiation, such as a light signal, having at least one predetermined characteristic, towards the camera, and in that the image acquisition system (3) comprises

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means (13) of recognizing said at least one initialization and location signal to define the coordinates of said at least one initialization signal in the images obtained from this camera and means (19) for defining, according to a predetermined program, at least one detection area

(15) in the field of vision of the camera based on said coordinates of said at least one initialization signal.

- 5 11. The programming device as claimed in claim 10, characterized in that the camera (2) is a video camera and in that said recognition and location means comprise at least one digital filtering or thresholding means (16) in order to compare  
10 prestored data with data corresponding to the points of the video signal.
12. The programming device as claimed in one of claims 10 and 11, characterized in that the image  
15 acquisition system comprises notification means (46) and means for activating these notification means when the coordinates corresponding to said at least one initialization signal are acquired.
- 20 13. The programming device as claimed in one of claims 10 and 11, characterized in that it comprises sending and receiving means (49, 50) associated with the mobile sending device (21) and sending and receiving means (47, 48) associated with said  
25 image acquisition system (3), suitable for exchanging functional signals.
14. The programming device as claimed in claim 13, characterized in that it comprises synchronization  
30 means (53, 54) for synchronizing said mobile sending device (12) and said image acquisition system (13) using synchronization signals exchanged via said sending and receiving means.
- 35 15. The programming device as claimed in one of claims 13 and 14, characterized in that it comprises acknowledgement means (51, 52) at least for signaling the end of the definition of said

coordinates and/or the end of the definition of said at least one detection area.

- 5      16. An appliance for the surveillance of at least one predetermined area, characterized in that it comprises a programming device as claimed in any one of claims 10 to 15 and in that it is programmed according to the method as claimed in any one of claims 1 to 9.